

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,133	07/16/2003	Viktor Varsa	944-001.083-1	4482
4955 WADE EDECS		Viktor Varsa ViX & ADOLPHSON, LLP	EXAMINER	
10/623,133 07/16/2003 Viktor Varsa	SMITH, MARCUS			
	-		ART UNIT	PAPER NUMBER
MONICE, CI	00400		2619	
			MAIL DATE	DELIVERY MODE
			12/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)
		10/623,133	VARSA ET AL.
	Office Action Summary	Examiner	Art Unit
		Marcus R. Smith	2619
Period fo	The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address
A SH WHIC - Exte after - If NC - Failu Any	CORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Depriod for reply is specified above, the maximum statutory period warre to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timused and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status			
2a)	Responsive to communication(s) filed on <u>04' Or</u> This action is FINAL . 2b) This Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro	
Dispositi	ion of Claims		
5) □ 6) ⊠ 7) □ 8) □	Claim(s) <u>1-32</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdray Claim(s) is/are allowed. Claim(s) <u>1-32</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or ion Papers The specification is objected to by the Examine	vn from consideration. r election requirement.	
	The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the december drawing sheet(s) including the correction of the oath or declaration is objected to by the Extended in the correction of the correction o	drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority ι	under 35 U.S.C. § 119		
a)	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau See the attached detailed Office action for a list of	s have been received. s have been received in Applicati ity documents have been receive I (PCT Rule 17.2(a)).	on No ed in this National Stage
2) Notice 3) Information	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date 11/15/07.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate

10/623,133 Art Unit: 2619

DETAILED ACTION

Claim Objections

1. Claim 5 is objected to because of the following informalities: The applicant should delete "any of" in claim 5, line 1. Appropriate correction is required.

Response to Amendment

2. The amendment under 37 CFR 1.132 filed 10/04/07 is sufficient to overcome the rejection of claims 1-8, 12-22, and 26-32 based upon Despande.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 1-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Harumuto et. al. (US 7,016,970 same as US 2002/0004840 on the IDS 11/15/07). with regard to claim 1, Harumuto teaches:

A method comprising:

determining client's (terminal, 102) chosen pre-decoder buffering parameters (starget and T delay) at a streaming client of a multimedia streaming network (column 11, lines 4-16), wherein the multimedia streaming network has a streaming server (101) to transmit to the streaming client a packet stream over a constant delay channel (column

10/623,133 Art Unit: 2619

13, lines 20-30), the server adapted to provide to the streaming client a signal indicative of pre-decoder buffering parameters (column 9, lines 60-67), and wherein the pre-decoder buffering parameters are determined at the server to ensure that the streaming client is able to play out the packet stream without client buffer violation (column 12, lines 60-67, and column 13, lines 1-7); and

providing information indicative of the client's chosen pre-decoder buffeting parameters to the streaming server (column 11, lines 1-10), so that client's jitter buffeting capabilities can be determined based on a difference between the client's chosen pre-decoder buffering parameters provided to the streaming server (column 12, lines 29-43) and the pre-decoder buffeting parameters provided by the streaming server (column 12, lines 55-67).

with regard to claim 13, Harumuto teaches (figure 3):

A streaming client device (102), comprising:

at least one buffer (505);

means for receiving a packet stream from a streaming server and storing the packet stream in said at least one buffer (column 10, lines 11-20);

means (510) for playing-out the packet stream (column 10, lines 20-29); and means for providing information indicative of the client's chosen pre-decoder buffering parameters to the streaming server (column 11, lines 1-10).

with regard to claim 27, Harumuto teaches:

10/623,133 Art Unit: 2619

A streaming server device (101) comprising:

means (transmission/reception module, 402) for transmitting a packet stream to a streaming client device (column 9, lines 60-67), and

means (transmission/reception module, 402) for receiving information indicative of chosen pre-decoder buffering parameters of the streaming client device (column 12, lines 44-63).

with regard to claim 32, Harumuto teaches:

A data streaming system comprising:

a streaming client device (102), and

a streaming server device (101), wherein the streaming client device comprises:

means for playing-out a packet stream provided by the streaming server device (column 10, lines 20-30); and

means for providing information indicative of the client's chosen pre-decoder buffering parameters to the streaming server device (column 11, lines 1-16), and wherein the streaming server device comprises

means for transmitting the packet stream to the streaming client device (column 9, lines 60-67), and

means for receiving the information indicative of the client's chosen pre-decoder buffering parameters (column 12, lines 44-63).

with regard to claim 2, Harumuto teaches:

A method according to claim 1, wherein the pre-decoder buffer parameters provided by the streaming server to the streaming client are chosen based on variable bit-rate characteristics of the transmitted packet stream (column 13, lines 1-20) and the buffering applied by the streaming server (column 9, lines 50-67).

with regard to claims 3 and 19, Harumuto teaches:

A method according to claim 1, wherein the streaming client is adapted to provide the information indicative of the client's chosen pre- decoder buffering parameters to the streaming server as soon as the streaming client determines pre-decoder buffering parameters chosen to be used for a particular streaming session (column 11, lines 4-28).

with regard to claims 4 and 20, Harumuto teaches:

A method according to claim 1, wherein the streaming client is adapted to provide the information indicative of the client's chosen pre- decoder buffering parameters to the streaming server at beginning of a new streaming session (setup is at the beginning new session, column 11, lines 1-10).

with regard to claims 5 and 21, Harumuto teaches:

A method according to claim 1, wherein the streaming client is adapted to dynamically change its pre-decoder buffering parameters during a streaming session, said method further comprising

providing further information indicative of the changed client's pre-decoder buffering parameters to the streaming server during the streaming session (column 15, lines 15-22).

with regard to claims 6 and 29, Harumuto teaches:

A method according claim 1, further comprising

applying in the streaming server rate-control and/or rate shaping algorithms that utilize the information indicative of the client's chosen pre-decoder buffering parameters to compensate for packet transfer delay and channel rate variations (column 13, lines 1-20).

with regard to claims 7 and 30, Harumuto teaches:

A method according to claim 1, wherein the streaming server is adapted to optionally consider the information indicative of the client's chosen pre-decoder buffering parameters in rate control and/or rate shaping (column 13, lines 1-20).

with regard to claims 8, 22, and 31, Harumuto teaches:

A method according to claim 1, wherein the information indicative of the client's chosen pre-decoder buffering parameters includes at least one of the following:

information regarding a size of the client's pre-decoder buffer (S-target, column 11 lines 8-16),

information regarding a pre-decoder buffering period (T-delay, column 11, lines 17-26) and

information regarding a post-decoder buffering time.

with regard to claims 9 and 23, Harumuto teaches:

A method according to claim 1, wherein the streaming client is adapted to provide the information indicative of the client's chosen pre-decoder buffering parameters to the streaming server in a Real-Time Streaming Protocol (RTSP) an

RTSP OPTIONS request message (the examiner views the commands in figure 4, as RTSP messages.).

with regard to claims 10 and 24, Harumuto teaches:

A method according to claim 9, wherein the information indicative of the client's chosen pre-decoder buffeting parameters is provided to the streaming server in an RTSP PLAY request message (since the system can dynamically change the parameters in the session (see figure 5), the parameters can be sent any RSTP commands.).

with regard to claims 11 and 25, Harumuto teaches:

A method according to claim 9, wherein the information indicative of the client's chosen pre-decoder buffeting parameters is provided to the streaming server in an RTSP PING request message (since the system can dynamically change the parameters in the session (see figure 5), the parameters can be sent any RSTP commands.).

with regard to claims 12 and 26, Harumuto teaches:

A method according to claim 1, further comprising

determining in the streaming client whether the streaming server supports the signaling of the client's pre-decoder buffering parameters (column 14, lines 52-67).

with regard to claim 14, Harumuto teaches:

A streaming client device according to claim 13, wherein said at least one buffer comprises a pre-decoder buffer and a delay jitter buffer (buffer 505 is a pre-decoder and jitter buffer since improves jitter: column 12, lines 30-42).

10/623,133 Art Unit: 2619

with regard to claim 15, Harumuto teaches:

A streaming client device according to claim 13, wherein said at least one buffer comprises a pre-decoder buffer and a delay jitter buffer (buffer 505 is a pre-decoder and jitter buffer since improves jitter: column 12, lines 30-42).

with regard to claim 16, Harumuto teaches (see claim 14):

A streaming client device according to claim 14, wherein the pre-decoder buffer and delay jitter buffer are integrated as a single unit.

with regard to claim 17, Harumuto teaches (See claim 15):

A streaming client device according to claim 15, wherein the pre-decoder buffer and delay jitter buffer are integrated as a single unit

with regard to claim 18, Harumuto teaches:

A streaming client device according to claim 13, further comprising means for receiving an indication of pre-decoder buffering parameters chosen by the streaming server (receiving OK message from the server, column 13, lines 14-20).

with regard to claim 28, Harumuto teaches:

A streaming server device according to claim 27, wherein the packet stream is transmitted over a constant delay channel (column 13, lines 20-30), and wherein the streaming server device is adapted to provide a signal indicative of recommended predecoder buffering parameters to the streaming client (column 9, lines 60-67), wherein said pre-decoder buffering parameters are determined by the server so as to ensure that the streaming client device is able to play out the packet stream without client buffer violation channel (column 12, lines 60-67, and column 13, lines 1-7).

Response to Arguments

5. Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus R. Smith whose telephone number is 571 270 1096. The examiner can normally be reached on Mon-Fri. 7:30 am - 5:00 pm every other friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRS 12/10/07

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600